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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,658	11/18/2003	Jin-Hee Jeong	61610100US	2830
58027 7590 08/13/2007 H.C. PARK & ASSOCIATES, PLC 8500 LEESBURG PIKE SUITE 7500 VIENNA, VA 22182			EXAMINER DINH, DUC Q	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 08/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/714,658	JEONG, JIN-HEE	
	Examiner	Art Unit	
	DUC Q. DINH	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 9-12 is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Applicant's Amendment filed on June 13, 2007.

Drawings

2. Figures 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Regarding claims 6-7, the phrase "*may* maintain discharge..." [emphasis added] renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claim 8 is rejected under 35 U.S.C. 102(a) as being anticipated by Applicant Admitted Prior Art, AAPA. Figs 1-6, pages 1-5.

In reference to claim 1, the AAPA, Fig. 3, page 4 discloses a method for driving a plasma display having the structure as claimed (see Fig. 1) comprising during a preset period:

applying a ramp voltage to the sustain electrode X to a first voltage after a previous sustain period is complete;

maintaining the address electrode and the sustain electrode at a second voltage (V0), and applying a rising ramp voltage to the scan electrode, the rising ramp voltage gradually rising from a third voltage (Vs) to a fourth voltage (Vset), the third voltage (Vs) being less than below the a discharge firing voltage with respect to the sustain electrode (page 4, lines 1-5) and the fourth voltage (Vset) being greater than the to a third voltage over a discharge firing voltage;

applying a falling ramp voltage (Vset – Vs) to the scan electrode Y while maintaining the sustain electrode at a first bias voltage (V0), the falling ramp voltage gradually falling to a predetermined (V0) voltage from the third voltage (Vs); and

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maintaining the sustain electrode at a second bias voltage below the first bias voltage while maintaining the scan electrode at the predetermined voltage after the applying a falling ramp voltage.

In reference to claim 8, the AAPA, discloses a method for driving a plasma display including a scan electrode and a sustain electrode provided in parallel on a first substrate, and an address electrode provided on a second substrate, the address electrode crossing the scan electrode and the sustain electrode (Fig. 1), the method comprising:

during a reset period (Fig. 3), applying a falling ramp voltage to the scan electrode (see the falling ramp voltage applied to Y scanning electrode) and applying a first bias voltage (V_e) to the sustain electrode; and

applying a second bias voltage to the sustain electrode (V_0), the second bias voltage having a voltage level lower than a voltage level of the first bias voltage (V_e), and

applying a predetermined voltage (V_{set}) to the scan electrode after applying the falling ramp voltage, wherein the falling ramp voltage falls to the predetermined voltage (V_{set}).

Allowable Subject Matter

7. Claims 1-5 and 9-12 are allowed.

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8. The following is a statement of reasons for the indication of allowable subject matter: none of the cited arts teaches or suggest during a preset period of a plasma driving panel:

With respect to claim 1:

applying a ramp voltage to the sustain electrode to a first voltage after a previous sustain period is complete;

maintaining the address electrode and the sustain electrode at a second voltage, and applying a ramp voltage to the scan electrode, the rising ramp voltage gradually rising from a third voltage to a fourth voltage, the third voltage being less than below the a discharge firing voltage with respect to the sustain electrode and the fourth voltage being greater than the to a third voltage over a discharge firing voltage;

applying a falling ramp voltage to the scan electrode while maintaining the sustain electrode at a first bias voltage, the falling ramp voltage gradually falling to a predetermined voltage from the third voltage; and

maintaining the sustain electrode at a second bias voltage below the first bias voltage while maintaining the scan electrode at the predetermined voltage after the applying a falling ramp voltage.

With respect to claim 12,

during a reset period,

applying a ramp voltage to the sustain electrode to a first voltage after a previous sustain period is complete;

maintaining the address electrode at a second voltage, maintaining the sustain electrode at a third voltage, and applying a rising ramp voltage to the scan electrode, the

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rising ramp voltage gradually rising from a fourth voltage to a fifth voltage, the fourth voltage being less than a discharge firing voltage with respect to the sustain electrode and the fifth voltage being greater than the discharge firing voltage;

applying a falling ramp voltage to the scan electrode while maintaining the sustain electrode at a first bias voltage, the falling ramp voltage gradually falling to a predetermined voltage from the fourth voltage; and maintaining the sustain electrode at a second bias voltage below the first bias voltage while maintaining the scan electrode at the predetermined voltage after the applying a falling ramp voltage.

9. Claims 6-7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

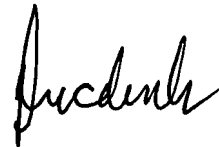
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE can be reached on (571)272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DUC Q DINH
Examiner
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A handwritten signature in black ink, appearing to read 'Duc Q Dinh', is written below the printed name and title.